



Is community-based waste management the way forward for Chennai's circularity?

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Cities of Care
Conference

Shaping sustainable and equitable futures through the water-food-waste nexus

IIT Madras, January 30-31 2026

Fire breaks out in Perungudi dumpyard

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THE HINDU BUREAU

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Context

6000 to 6500 tons per day

of waste generated in the city

13% (~1.9 million tons of CO2e)

of GHG emissions in Chennai city comes from solid waste

> 93% of total GHG emissions

Comes from mixed total waste disposed at Perungudi and Kodungaiyur dumpsites

25% – 30%

Current segregation rate acc. to sector experts

5 MCCs & 22 MRFs/ RRCs

Currently functioning



© Citizen Matters

A Micro Composting Centre

Community-led Waste Management in Chennai



Residents volunteering at the lane composter (Kasturba Nagar) (top left);

Top Right: Segregated milk packets collected at an apartment in Kasturba Nagar (top right);



Bottom left: Apartment level composting at Mandaveli (bottom left);

Bottom right: Dry waste collection by residents of Casagrand Elan, Thazhambur (top right)

Approach to We Segregate

Using the Circularity Assessment Protocol

PRIMARY DATA COLLECTION

9 100 meter litter transects across nine 1 sq km grids using a Marine Debris Tracker app

26 grocery / convenience shops surveyed

28 food vendors surveyed

20 interviews with government, industry, academic, and NGO representatives.

SECONDARY DATA COLLECTION

Policy and Literature review

DURATION

Sept 2021 – Feb 2022

Developing Chennai's Opportunity List

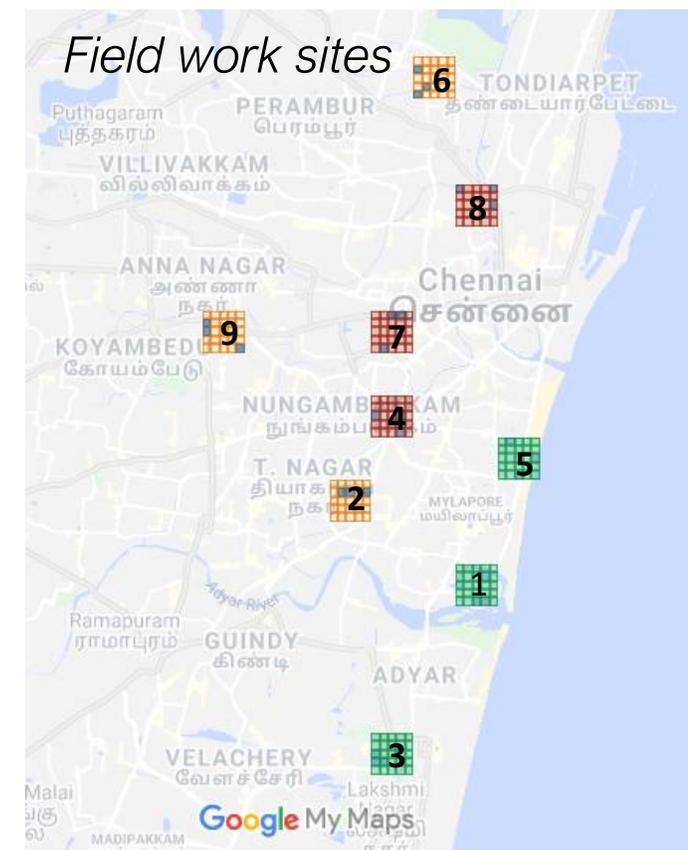
2 brainstorming workshops

19 discussions with relevant public, private and civic partners

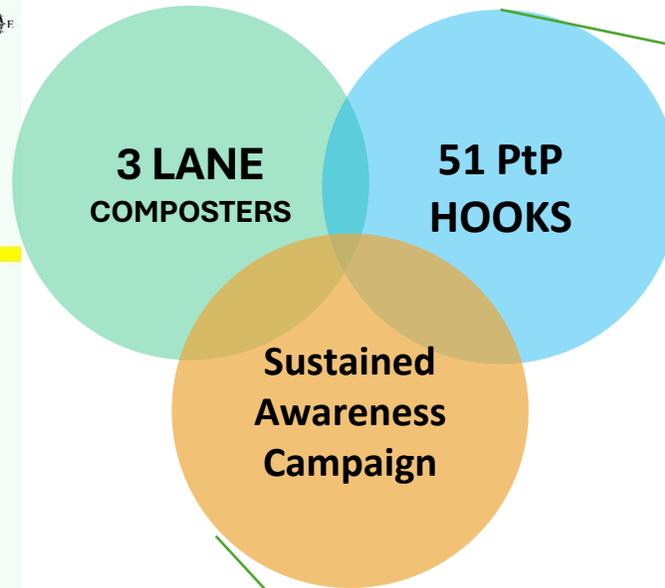
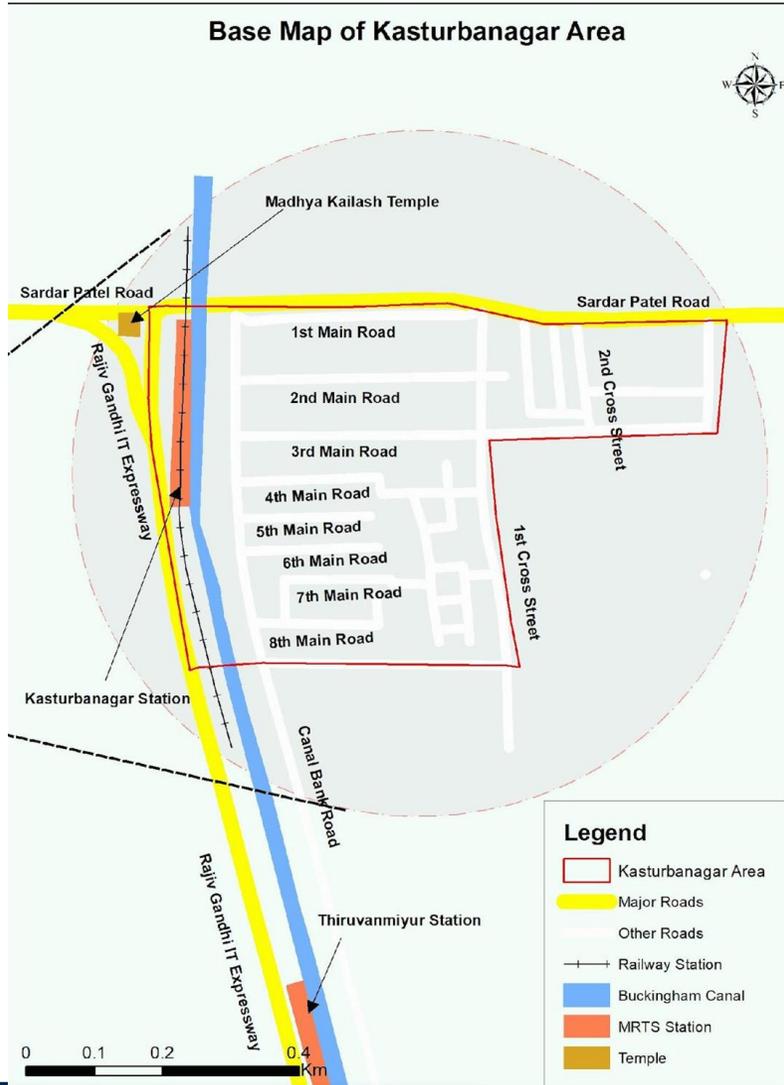
Field visits to relevant locations (trash boom sites, dump yards and MRFs – private & public)

DURATION

March 2022 – Jan 2023

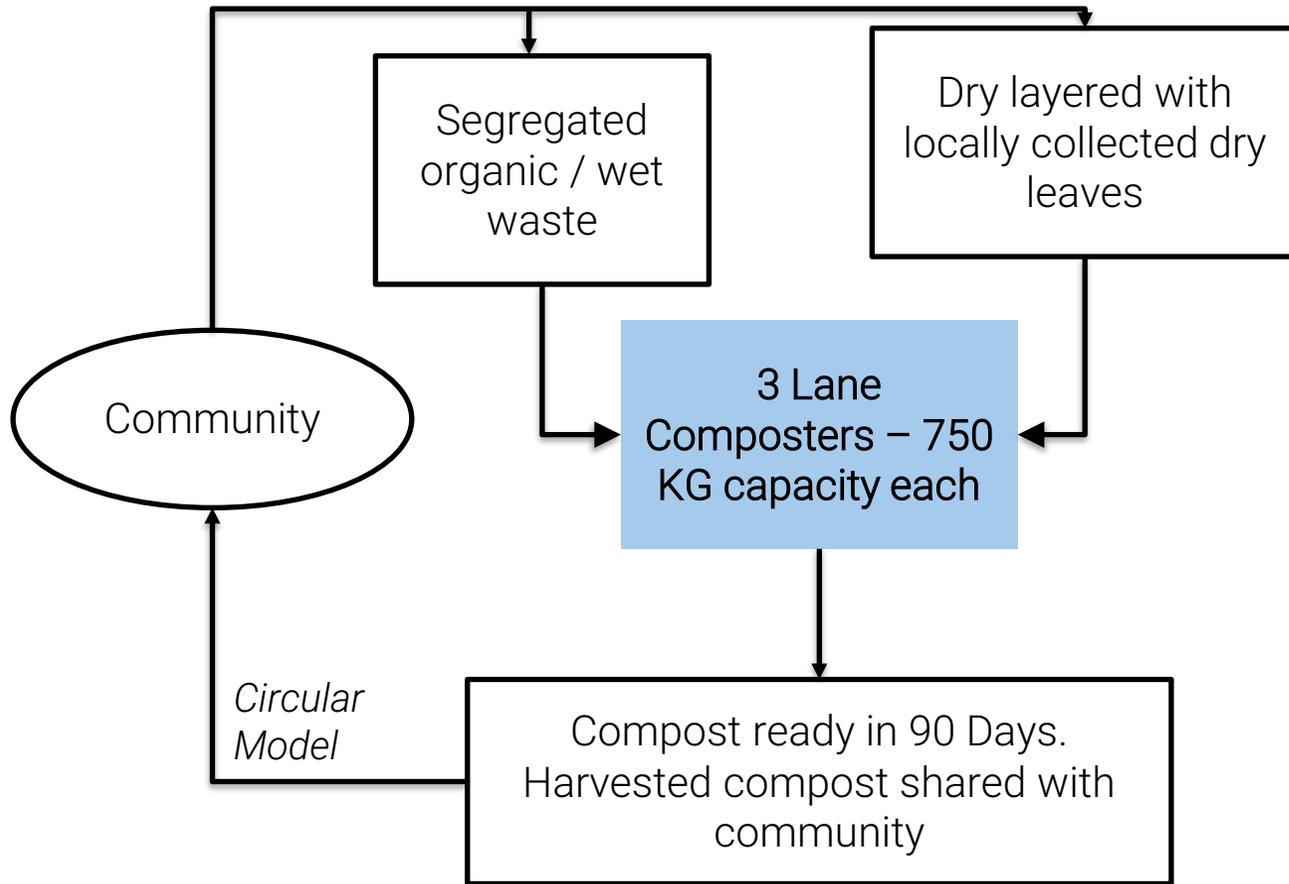


We Segregate | Community-Based Circular SWM



- Targets residents at individual & community level to increase their capabilities and opportunities to segregate
- Uses 'nudges' to improve source segregation rates by sensitizing and building awareness
- Improves household recycling rates by maximizing recovery & minimizing waste going to dump yards

Component 1: Lane Composter



Bio-degradable waste processing & use



Component 2: Punch the Plastic Hooks

- Metal hooks (51) installed to collect soft plastics
- Urbaser Sumeet BoV Drivers collect from respective buildings and place in a centralized location
- Bottles for Change (Bisleri's CRC initiative) collects and transports the soft plastics to Spreco Pvt. Ltd where they re-use it to make furniture boards.



Waste Collection Drive (top left); Waste themed cricket match (top right) and football match (bottom right), waste rally (bottom left)

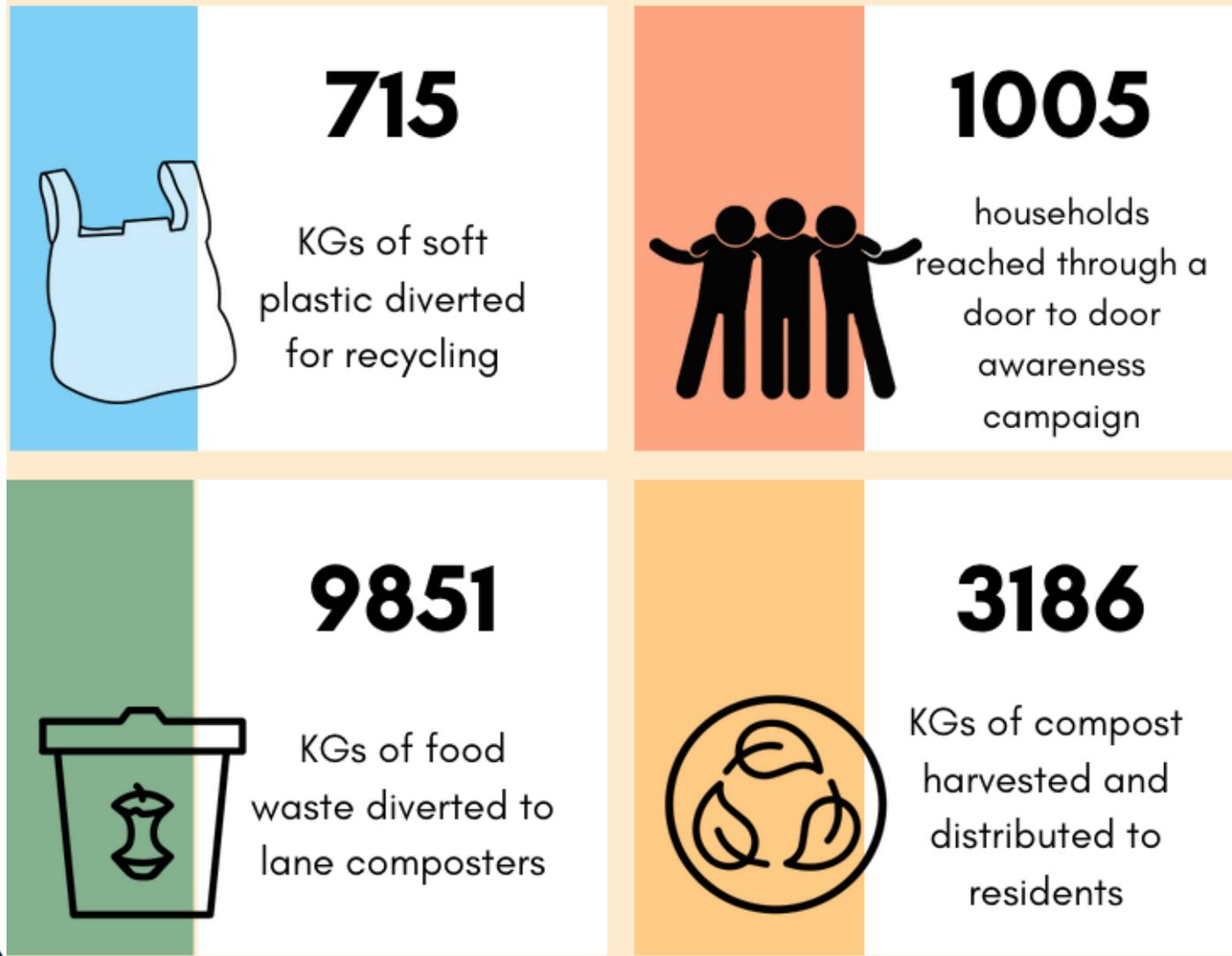


Component 3: Sustained Awareness Campaign

- Door to door interactions
- Social Media messages
- Live events such as rallies, waste collection drives, waste themed sports event.



We Segregate Impact



Observations / Learnings

- Capacity building & constant interactions with residents essential for ensuring physical infrastructure is used. However, it is also the most challenging.
- More active support and validation of existing efforts from local government can help increase impact.
- Active multi-stakeholder partnership critical to sustain community-based efforts over time.



Discussing ways to strengthen the project with residents



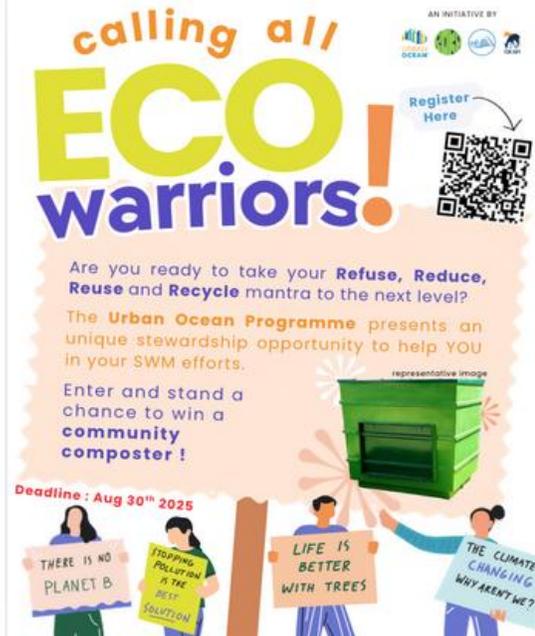
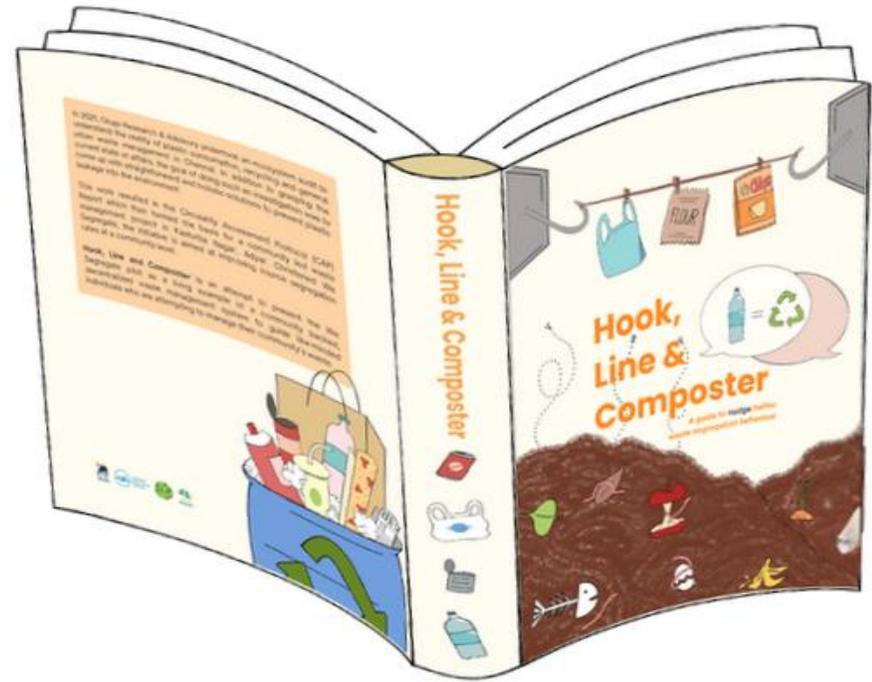
Conclusions

- For community-led projects to be successful, more active Government support and enforcement of SWM 2016 Rules is required.
- Enforcement can be strengthened by providing RWAs with the authority to enforce fines for non-compliance.
- In the Chennai Climate Change Action Plan 2023, GCC already recognises the importance of community led efforts which needs to be leveraged.
- Clear messaging required from GCC which emphasise the importance of source segregation irrespective of waste processing methods.



Way Forward

- **Hook Line & Composter** – step by step documentation of the We Segregate project encouraging easy replication.
- **Stewardship Contest** - Scale up to another neighbourhood – Clover by the River who are receiving two composters and will be guided on their waste management journey





Thank You!

